

Patent Claims

1. A mobile radio system having a number of mobile stations (A, B, C),
5 with the mobile stations having means for carrying out transmission/reception operation in the duplex mode and in the semiduplex mode,
with a first mobile station (A) having means for simultaneously carrying out transmission/reception
10 operation with a base station in the duplex mode and with a second mobile station (B) in the semiduplex mode, and
the duplex mode being in the form of the frequency division duplex mode, and the semiduplex mode being in
15 the form of the time division duplex mode.
2. The mobile radio system as claimed in claim 1, characterized in that the first mobile station (A) has means for carrying out transmission/reception operation
20 with the base station in the duplex mode and with the second mobile station (B) in the semiduplex mode in such a manner that the transmission/reception operation is carried out cyclically in timeslots, and the timeslots for the duplex and semiduplex mode run
synchronously with respect to one another.
- 25 3. The mobile radio system as claimed in one of the preceding claims, characterized in that the first mobile station (A) has means for carrying out transmission/reception operation with the base station in the duplex mode and with the second mobile station
30 (B) in the semiduplex mode, in such a manner that signals from the second mobile station are transmitted via the first mobile station to the base station, and vice versa.
- 35 4. The mobile radio system as claimed in one of the preceding claims, characterized in that the first mobile station (A) has means for carrying out transmission/reception

operation with the second mobile station (B) and with a third mobile station (C) in the semiduplex mode.

5. The mobile radio system as claimed in one of the preceding claims, characterized in that the first mobile station (A) has means for carrying out transmission/reception operation with the second (B) and the third (C) mobile station in the semiduplex mode, in such a manner that signals from the second mobile station are transmitted via the first mobile station to the third mobile station, and vice versa.

6. The mobile radio system as claimed in one of the preceding claims, characterized in that the mobile stations that are among the number of mobile stations are coupled to one another in such a manner that a communication chain or a communication network is formed.

7. The mobile radio system as claimed in one of the preceding claims, characterized in that the first mobile station (A) has means for manually or automatically switching on and off the transmission of signals from the second mobile station (B) via the first mobile station (A) to the base station or to the third mobile station (C), and vice versa.

8. A mobile station (A) having means for simultaneously carrying out transmission/reception operation with a base station in the duplex mode and with a second mobile station (B) in the semiduplex mode, with the duplex mode being in the form of the frequency division duplex mode, and the semiduplex mode being in the form of a time division duplex mode.

9. The mobile station (A) as claimed in claim 8, having means for carrying out transmission/reception operation with the base station in the duplex mode and with the second mobile station (B) in the semiduplex mode, in such a manner that the

transmission/reception operation is carried out cyclically in timeslots, and the timeslots for the duplex and semiduplex mode run synchronously with respect to one another.

5 10. The mobile station (A) as claimed in one of claims 8 to 9, having means for carrying out transmission/reception operation with the base station in the duplex mode and with the second mobile station (B) in the semiduplex mode, in such a manner that
10 signals from the second mobile station are transmitted via the first mobile station to the base station, and vice versa.

11. The mobile station (A) as claimed in one of claims 8 to 10, having means for carrying out
15 transmission/reception operation with the second mobile station (B) and with a third mobile station (C) in the semiduplex mode.

12. The mobile station (A) as claimed in one of claims 8 to 11, having means for carrying out
20 transmission/reception operation with the second (B) and the third (C) mobile station in the semiduplex mode, in such a manner that signals from the second mobile station are transmitted via the first mobile station to the third mobile station, and vice versa.

13. The mobile station (A) as claimed in one of claims 8 to 12, having means for manually or automatically switching on and off the transmission of signals from the second mobile station (B) via the first mobile station (A) to the base station or to the
25 third mobile station (C), and vice versa.

14. The mobile station (A) as claimed in one of claims 9 to 13, having means for carrying out transmission/reception operation with the second (B) and the third (C) mobile station in the semiduplex
35 mode, in such a manner that signals from the second mobile station are transmitted via the first mobile station to the third mobile station, and vice versa.

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15. The mobile station (A) as claimed in one of claims 9 to 14, having means for manually or automatically switching on and off the transmission of signals from the second mobile station (B) via the first mobile station (A) to the base station or to the third mobile station (C), and vice versa.

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